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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,769	02/25/2002	Eivind Stenersen	758.1040USD1	3613
23552	7590	01/09/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			SAVAGE, MATTHEW O	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/084,769

Applicant(s)

STENERSEN ET AL.

Examiner

Matthew O Savage

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-14 and 24-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1723

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Concerning claims 24-26, the concept of the baffle plate having an average cross sectional thickness greater than 3 inches as covered by the limitation "over/at least 500%" in claims 24 and 26 and "at least 400%" in claim 25 is considered new matter.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 13, 14, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel.

With respect to claims 1, 13, 24-27, '606 discloses a metal baffle plate 30' having an inlet arrangement 31 and an outlet arrangement 32, a metal/steel can 10 having a

Art Unit: 1723

surrounding wall 10 with a rounded end wall 15 an interior and an average cross sectional thickness different than the baffle plate (see FIG. 2), the metal can average cross sectional being at least .008 inch and no greater than .048 inch (e.g., 1.2mm or .047 inch, the metal can being secured to the baffle plate along a welded seam 50 (see FIG. 5), and a filter element 20 within the interior of the can. '606 fail to specify a laser weld. Deibel discloses the concept of providing a laser weld 22 in an analogous filter and suggests that such a weld has improved asthetics and bonding features (see lines 12-14 of col. 4). It would have been obvious to have modified the '606 filter so as to have included a laser weld as suggested by Deibel in order to provide a weld having improved asthetics and bonding features. '606 and Deibel fails to specify the baffle plate as having a thickness of at least .080 inch as recited in claim 1, or the baffle plate as being formed of steel and as having a thickness of no greater than 3 inches and the can as having a thickness of .015-.020 inch as recited in claim 13, the baffle plate being formed of steel and as having a thickness of over/at least 500% that the thickness of the can as recited in claims 24 and 26, the limitation baffle plate being formed of steel and having a thickness that is at least 400% of the can thickness as recited in claim 25, or the can thickness being .4-1.4% an inner radius of the can as recited in claim 27, however, such modifications would have been obvious in order to optimize the strength of the filter for a particular application (see *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)).

Art Unit: 1723

Regarding claim 3, '606 and Deibel disclose radially directed seals (43 of '606 and 10 of Deibel) between the first end cap and the outer annular surface of the tubular member.

Concerning claim 4, '606 and Deibel disclose the baffle plate as including an inner surface oriented within the can interior, and an opposite outer surface remote from the can interior, the baffle plate including a channel (holding seal 41 of '606 and 5 of Deibel) in the outer surface for holding a seal member.

Regarding claim 14, both '606 and Deibel disclose the baffle plate as having an outer annular surface with the welded seam as being between the can and outer annular surface.

Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 and Deibel as applied to claim 6 above, and further in view of Gewiss et al.

With respect to claim 2, '606 and Deibel fail to specify a first end cap formed of a compressible moldable material. Gewiss et al disclose the concept of forming end caps from compressible moldable material (see lines 59-63 of col. 2) and suggests that such an arrangement facilitates construction of the filter by providing a unitary end cap and radial seal arrangement. It would have been obvious to have modified the combination of '606 and Deibel so as to have included end caps as suggested by Gewiss et al in order to facilitate construction of the filter by incorporating a unitary end cap and radial seal arrangement.

Art Unit: 1723

With respect to claim 11, '606 and Deibel fail to specify the second end cap as including a plurality of radially directed protrusions engaging an inner portion of the can, however, Gewiss et al disclose just such a feature 13 (see FIGS. 1-2). Gewiss et al teach that such structures center the filter element within the housing (see lines 66-68 of col. 2). It would have been obvious to have modified the combination suggested by '606 and Deibel so as to have included protrusions 13 as suggested by Gewiss et al in order to center the filter element within the filter housing.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel as applied to claim 4 above, and further in view of Oelschlaegel.

With respect to claim 5, '606 and Deibel disclose a first end cap that radially abuts the outer annular surface of the tubular member for forming the radially directed seal but fail to specify a plurality of axially extending protrusions. Oelschlaegel discloses an analogous filter including a plurality of axially extending protrusions 99 and suggests that such an arrangement ensures that a flow passage is provided between the end cap and filter housing. It would have been obvious to have modified the combination suggested by '606 and Deibel so as to have the protrusions as suggested by Oelschlaegel in order to ensure that a flow passage is provided between the end cap and filter housing/baffle plate.

Art Unit: 1723

As to claim 6, '606 discloses a second end cap 26 and an inner liner 21 with the media pack extending between the first and second end caps and the media pack circumscribing the inner liner.

Claims 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel and Oelschlaegelas applied to claim 6 above, and further in view of JP 9-133233.

Regarding claim 7, '606 discloses a structural member 13 oriented in the can interior and abutting an end of the can remote from the baffle plate and supporting the filter element, but fails to specify a structural member that is rigid. '233 discloses a rigid structural member in an analogous filter element and suggests that such a member provides secure support for the filter element 13. It would have been obvious to have modified the filter suggested by '606, Deibel, and Oelschlaegelas so as to have included a rigid structural member as suggested by '233 in order to provide secure support for the filter element.

Concerning claim 8, '233 discloses the structural member as being secured to the second end cap 13a.

Regarding claim 10, '233 discloses the rigid structural member as including a bypass valve assembly 40.

Art Unit: 1723

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel and Oelschlaegel as applied to claim 6 above, and further in view of Baumann and Gullett.

With respect to claim 12, '606 and Deibel fail to specify pleated paper potted in first and second end caps comprising urethane or acrylic and the inner liner comprised of a rigid plastic material. Baumann discloses a pleated paper filter element bonded to first and second end caps and an inner liner formed of a rigid plastic material and suggests that such an arrangement is easily disposable by incineration (see from line 55 of col. 1 to line 25 of col. 2, lines 62-67 of col. 3, and from line 66 of col. 2 to line 10 of col. 5). It would have been obvious to have modified the combination suggested by '606, Deibel, and Oelschlaegel so as to have included a pleated paper filter element including an inner liner formed of a rigid plastic material in order to facilitate disposal of the filter element by incineration. '606, Deibel, Oelschlaegel, and Baumann fail to specify end caps made of urethane. Gullett discloses end caps formed of urethane (see lines 1-10 of col. 9) and suggests that such end caps simplify construction of the filter element by providing a unitary end cap and radial seal arrangement. It would have been obvious to have modified the combination suggested by '606, Deibel, Oelschlaegel, and Baumann so as to have included end caps formed of urethane as suggested by Gullett in order to facilitate construction of the filter element by providing a unitary end cap and radial seal arrangement.



Art Unit: 1723

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel as applied to claim 27 above, and further in view of Gullett.

With respect to claim 28, '606 and Deibel fail to specify first and second end caps comprising urethane. Gullett discloses end caps formed of urethane (see lines 1-10 of col. 9) and suggests that such end caps simplify construction of the filter element by providing a unitary end cap and radial seal arrangement. It would have been obvious to have modified the combination suggested by '606, and Deibel so as to have included end caps formed of urethane as suggested by Gullett in order to facilitate construction of the filter element by providing a unitary end cap and radial seal arrangement.

Applicant's arguments filed 10-20-03 have been fully considered but they are not persuasive.

Applicant's request to initial the section citing the declaration of Mr. Stenersen in the other documents section of the IDS filed on 10-20-03 cannot be granted since the declaration does not constitute a publication. However, it is noted that the declaration including all of the exhibits have been reviewed by the examiner.

Applicant's indication that Japanese Patent JP 3-154606 A was incorrectly on the PTO 892 form mailed on 6-18-03 is noted. Accordingly, the reference and English translation provided by applicant will be cited in the instant office.

Applicants argument that the limitations of claim 13 have basis on page 15 of the specification is persuasive. Accordingly, the objection to the specification has been withdrawn.

Art Unit: 1723

The rejection of claims 1-4, 13, and 14 under 35 U.S.C. 103 over Deibel as well as the rejection under 35 U.S.C. 103 of claims 5-8 and 12 over Deibel in view of Oelschlaegel have been withdrawn since Deibel fails to teach or suggest the limitation of the rounded end wall added to amended claim 1.

Applicant argues that the rejection of claims 1-4, 13, and 14 under 35 U.S.C. 103 over Japanese '606 patent in view of Deibel is improper since Deibel fails to disclose the weld 22 as being a laser weld, however, it is held that the weld 22 is a laser weld since it is formed in the same manner as the laser weld 6 (see lines 56-62 of col. 4).

This action includes new grounds for rejection of original claim 12. Accordingly, this action has been made non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 6:00am-2:30pm.

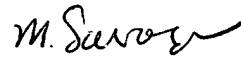
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda W. Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1101.

Application/Control Number: 10/084,769

Page 10

Art Unit: 1723



Matthew O Savage  
Primary Examiner  
Art Unit 1723

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December 30, 2003